

RELIGIOSITY AS A MODERATOR OF ANGER IN THE EXPRESSION OF
VIOLENCE BY WOMEN

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The purpose of this study was to determine the effects of women's anger and religiosity on their expression of violence toward their partner. The sample consisted of the 664 women who completed three interviews for Project HOW: Health Outcomes of Women, a study of low-income, ethnically diverse women in Dallas county. Across the waves, women completed measures of relationship violence, anger, and religiosity. Religiosity was not found to moderate the relationship between women's anger and their use of violence. When partners' threats and violence were included in the regression equations, these variables were consistently related to women's behavior. Due to several methodological limitations, clinical implications of the results should be considered with caution.

RELIGIOSITY AS A MODERATOR OF ANGER IN THE EXPRESSION OF VIOLENCE BY WOMEN

In national surveys, women who were the victims of violent crime were more likely to be assaulted by husbands or boyfriends than by others (Tjaden & Thoennes, 1998; Zawitz, 1994). Although most partner violence is reciprocal (Archer, 2000; Brush, 1990; Gray & Foshee, 1997; Marshall & Rose, 1987; Morse, 1995; Stets & Straus, 1990; Straus, 1980, 1990; Vivian & Langhinrichsen-Rohling, 1994), women were more likely than men to sustain an injury (Cantos, Neidig, & O'Leary, 1992; Cascardi, Langhinrichsen-Rohling, & Vivian, 1992; Foshee, 1996; Irwin, 1980; Laner, 1985; Langhinrichsen-Rohling, Neidig, & Thorn, 1995; Makepeace, 1985; Masterson, 1987; Morse; Nazroo, 1995; Shinn, 1996; Stacey, Hazlewood & Shupe, 1994; Tjaden & Thoennes, 1998; Vivian & Langhinrichsen-Rohling, 1994). Yet, Archer's (2000) meta-analysis of 82 studies showed women were more likely to report acts of physical violence toward their partner than were men. Thus, it is puzzling that women inflict violence despite the possibility they will be injured. This study will address factors (anger and religiosity) that may affect women's use of partner violence.

Women's use of violence has been studied in the context of reciprocal or mutual violence. The strength of the association between expressed and sustained acts varies by method and type of sample. Gray and Foshee (1997) found that when aggression was mutual, the severity and frequency of violence was higher than when the violence was one-sided. Gaertner and Foshee (1999) showed high school females (71%) were as likely to engage in violence as males (86%). A study of 21 year olds in New Zealand found fewer males (22%) than females (37%) reporting reciprocal violence (Magdol, Moffitt, Caspi, Newman, Fagan, & Silva, 1997).

Correlational research gives more information on the strength of the association. Marshall and Rose (1990) reported a correlation of .82 for recent violence and .63 for past expressed and sustained violence among female undergraduates. Among males, the association was nonsignificant for recent acts and slightly weaker ($r = .54$) than females for all past violence. Similar correlations between expressed and sustained acts were found for females and males ($r = .73$) by Clark, Beckett, Wells, and Dungee-Anderson (1994). Archer and Ray's (1989) results in the United Kingdom showed a moderate correlation. Thus, in dating relationships, violence appears to be perceived as reciprocal, at least by women.

Studies of marital couples also support the notion that violence in intimate relationships is usually mutual. Consistent with research on national samples (Straus, 1980; 1990), couples' reports of severity and frequency of acts of violence did not differ by gender (Vivian & Langhinrichsen-Rohling, 1994). Males and females have reported being both a victim and a perpetrator in 50% to 60% of the cases in the past year (Morse, 1995).

As the data are more consistent and stronger for females, it appears that women respond aggressively to their partners' acts of violence (Clark et al., 1994; Magdol et al., 1997) or initiate physical fights to which their partners respond in kind. Whether during a fight (Madgol, 1995) or in the overall relationship (Simonelli & Ingram, 1988; White & Koss, 1991), more females than males report violent acts. Though there is clear evidence of women's violence toward their partner, little research has been conducted to understand their aggressive behavior. Previous studies seem to view women's behavior as a response to their partner. For example, husbands and wives agreed that the men's

physical and emotional abuse caused women to continue their violence (Jacobson, Gottman, Gartner, Burns, & Wu Shortt, 1994). Women's violence may be an effort to communicate or get their partners' attention (Hamberger & Lohr, 1997), an act of retaliation or self-defense (Hamberger & Lohr, 1997; Jacobson et al., 1994), or due to fear (Morse, 1995). However, the fact that male violence is usually more severe than female (Archer & Ray, 1989; Ratner, 1998) may explain why more women (30%) than men (10%) report fearing their partner (Morse, 1995).

Some of women's violence may be traced to emotions other than fear. Anger, coercion, or psychological aggression (Cascardi & Vivian, 1995; Hamberger & Lohr) may also be relevant. Wives in violent relationships are as likely as husbands to engage in negative reciprocal behavior (Cordova, Jacobson, Gottman, Rushe, & Cox, 1993; Margolin, John, & Gleberman, 1988; Sabourin, 1995), and often respond with more aversive behavior than husbands (Cordova et al., 1993; Margolin, 1988). Yet, they are more likely than husbands to apologize, cry, or feel as if there was no clear ending to the situation (Cascardi & Vivian, 1995) after a specific incident. These types of findings implicate negative affect in women's use of violence toward their partner.

Negative affect, specifically anger, may contribute to reciprocity and verbal escalation, and could result in violence. The experience of negative affect may motivate an individual to intentionally inflict harm on the person who induced the negative affect (Carlson, Marcus-Newhall, & Miller, 1989), especially when cues to aggression are present (Carlson, Marcus-Newhall, & Miller, 1990). From 100 studies, Carlson et al. (1989) concluded that if one form of aggressiveness is heightened, other forms will be expressed. This suggests that if partners argue and become verbally aggressive when they

argue, physical aggression may also occur. Thus, in the presence of anger and aggressive cues, considerations that would inhibit aggression may have little or no effect, making conflict likely to escalate.

Though many studies suggest both genders are equally likely to express (Kopper & Epperson, 1996; Milovchevich, Howells, Drew, & Day, 2001; Thomas, 1989) and experience (Milovchevich et al., 2001; Smith, Ulch, Cameron, Cumberland, Musgrave, & Tremblay, 1989) anger, females tend to be more upset by inconsiderate, neglectful, or condescending behavior than males (Buss, 1989), and the severity of abuse sustained by females from their partners predicts the strength of their anger (Ratner, 1989). Because these behaviors are more likely and more frequent in intimate than in less close relationships, they may become problematic when partners are trying to resolve conflict. Though males report more negative consequences to their anger, such as involvement in physical fights, damage to property or interpersonal relationships (Deffenbacher, Oetting, Thwaites et al., 1996) and use more physical and verbal aggression than females when angry (Deffenbacher & Swaim, 1999), females' anger caused more negative feelings during and after conflict (Deffenbacher, Oetting, Thwaites et al., 1996; Mikolic, Parker, & Pruitt, 1997). Furthermore, females used more angry/hostile words than males when in conflict with men (Faber & Burns, 1996) and used more demands, complaints, angry statements, threats, and harassment during interactions (Mikolic et al.), thus escalating the argument with their partner. These considerations suggest that state anger, an emotional reaction to an immediate situation (Spielberger, 1985), is likely implicated in women's use of violence toward their partner.

With trait anger, individuals experience anger with more frequency and intensity

than others (Spielberger, 1999). In addition, individuals who are high in trait anger may respond to conflict differently than those who score lower on this trait. Deffenbacher, Demm, and Brandon (1986) Deffenbacher, Oetting, Thwaites et al. (1996), and Deffenbacher, Oetting, Lynch et al. (1996) showed high trait anger was associated with verbal and physical antagonism, outward expression, including physical assault of individuals or objects, variability in situations that provoked anger, and more intense anger. Trait anger also correlates with hostile feelings and behaviors, dysfunctional coping when angry, frequent and often severe consequences including damage to property and friendships. For individuals high in trait anger, aggressive cues may provoke more aggressive behavior toward their partner than low trait anger individuals (Deffenbacher, Oetting, Thwaites et al., 1996). Women high and low in trait anger have also been compared. High anger women were more likely to express anger outwardly, more likely to be married, and less likely to work full-time than low anger women (Thomas & Donnelan, 1991). Findings such as these suggest that trait anger may contribute to women's use of violence toward their intimate partner.

These considerations give ample reason to examine the association between anger and use of intimate partner violence among women. In addition, Thomas and Donnelan's (1991) finding that high anger women were less likely than women low in anger to attend church regularly suggests that violence, anger, and religiosity may be associated. Religiosity may have a beneficial effect on negative emotions, including anger. For example, Mookherjee (1994) found that subjective well-being was correlated with church membership, frequency of church attendance, Bible reading, and total devotional intensity. This sense of well-being may decrease the likelihood or intensity of

negative emotions, such as anger. Further, the constraints, ideals, and motivations, combined with the teaching provided by religious institutions may inhibit behavior deemed unacceptable by a religious group or its theology (Benda, 1997; Cochran & Beeghley, 1992). This notion is supported by negative associations between religiosity and substance use (Benda, 1997; Corwyn & Benda, 2000; Ginn, Walker et al., 1998; Patock-Peckham, Hutchinson, Cheong, & Nagoshi, 1997; Richard, Bell, & Carlson, 2000; Templin & Martin, 1999; Trusty & Watts, 1999) and criminal behavior (Baier & Wright, 2001; Johnson, Jang, Larson, & de Li, 2001; Sloane & Potvin, 1986). Frequency of church attendance predicted the experience and expression of anger (Thomas & Donnelan, 1991) and may lessen the expression of delinquent, aggressive, and harmful behaviors to the self and others (Richard et al., 2000). Findings such as these, however, do not necessarily suggest that religious individuals are less physically aggressive than those who are not religious (Reiss, 2000). Yet the weight of the evidence suggests women's religiosity may decrease their use of violence toward partners.

The negative association between religiosity and divorce proneness (Booth & Johnson, 1995) has less clear implications. On the one hand, religiosity may make it more likely a woman would remain in a violent relationship, thereby increasing the likelihood of violence. On the other hand, anger may be less likely to be elicited among highly religious women. If they do not become angry, women may be able to calmly deescalate their partners' and their own anger, thereby decreasing the likelihood of violence.

Altogether, past research suggests several predictions. First, the mutuality of partner violence will be affected by women's anger and religiosity. Specifically, controlling for trait anger should decrease the correlation between the violence women

report having expressed and sustained. This would suggest part of women's violence is a function of their anger. Similarly, controlling for religiosity should decrease the correlation. This is because religion should be inversely associated with women's violence. Second, religiosity is expected to moderate the relationship between women's anger and their use of violence. Anger and religiosity are expected to affect women's expression of violence to their partner. In addition, a research question will be addressed. Women's approach to religion, their conservative-liberal perspective, will be assessed to determine whether the type of religious belief is associated with anger and violence.

Method

Participants

Women ($N = 834$) from the southwest area of Dallas County participated in Project HOW: Health Outcomes of Women, a longitudinal study. Data for this study are from the first three waves of interviews. To participate, women had to be between the ages of 20 and 48 years, in a serious (self-defined) relationship with a man for at least one year, and have a household income below 200% of the federal poverty level or receive public aid.

The sample at Wave 1 consisted of 303 (36.3%) African American, 271 (32.5%) Euro-American, and 260 (31.2%) Mexican American women whose mean age was 32.8 years ($SD = 7.76$). Women were dating ($n = 201$, 24%), cohabiting ($n = 107$, 12.8%), common-law married ($n = 181$, 21.7%), or married ($n = 347$, 41.5%). Poverty status differed by ethnicity $F(2,816) = 11.70$, $p < .001$. Although African Americans were poorer (77.7%) than Euro-Americans (95.3%), and Mexican Americans (102.1%), they ($M = 12.54$ years, $SD = 1.73$) and Euro-Americans ($M = 12.04$, $SD = 2.10$) reported more

years of education than Mexican Americans ($M = 11.24$, $SD = 2.12$), $F(2,833) = 30.59$, $p < .001$. Wave 2 consisted of 697 women, of whom 272 (39.0%) were African Americans, 208 (29.8%) were Euro-Americans, and 217 (31.1%) were Mexican Americans. Wave 3 consisted of 664 women, 38.6% of whom were African American, 29.2 % were Euro-Americans, and 32.2% were Mexican Americans. Thus, the overall retention rate was 79.6%, representing 84.5% of the original African Americans, 71.6% of Euro-Americans, and 82.3% of Mexican Americans.

Procedure

Sample recruitment. Women were recruited to participate in a multi-wave study of factors that may impact their physical and mental health. Recruitment began in May, 1995, and was completed in December, 1996. Women were recruited through distribution of flyers, a mass mailing, personal contact, referral by participants, and announcements in newspapers, on the radio, and cable television. Flyers, written in Spanish and English, were distributed through churches, schools (preschools to junior colleges) and left in public locations (e.g., libraries, convenience stores, and other businesses). A mailing list, purchased from an independent company resulted in 18,000 letters sent to women in low-income areas. The mailing consisted of a letter and two to three flyers inviting women to call the Project HOW offices.

In addition, students were trained to do street recruiting. Students went to stores, clinics, laundromats, social service agencies, health fairs, etc. and talked to women they met. On contact sheets, only women's first names and telephone numbers were completed to maintain relative anonymity. The first names of friends and family members whom women felt might be willing to participate were also obtained. After this

information was collected, the contact sheets were taken to one of two offices in Oak Cliff. Female office workers made follow-up telephone calls to women listed on the forms, and answered inquiries from volunteers. Participants were then screened by the office workers and given more information about the study.

Screening. Screening consisted of asking women their ethnicity, the length of their relationship, household income, and the number of people dependent on that income. Income was matched to federal tables for number of people and dollar threshold for poverty. Women reporting greater than 175% of poverty were eliminated. Because they generally underreported income during screening, this was thought to allow for a final sample living within 200% of the poverty threshold. However, if volunteers received public assistance from a poverty program (e.g., food stamps), women were qualified, regardless of the income they reported. In addition, Mexican American women were asked whether they were born in the United States. If they were immigrants, they were asked the number of years they had attended school in the United States. All 19 immigrants were educated in the United States.

Among Hispanics, only Mexican American women were included because of likely differences in socialization of those who descended from different geographical areas (e.g., Puerto Rico, Cuba, Central or South America). Further, only women who were born in the United States or who attended school in the United States were included for two reasons. First, immigrants differed in unknown ways from native-born women. Second, the use of rating scales was likely to be relatively familiar only to fairly acculturated women.

Women were told that participation would require them to complete four interviews, each of which would last approximately three hours. They were told the interviews would occur over a two-year period. When women were qualified and agreed to participate, office workers obtained their full name and address before scheduling their first interview. For Wave 2, participants were contacted through the mail and by telephone.

Confidentiality. Strict procedures for confidentiality were devised for the study. A Certificate of Confidentiality was obtained from the Public Health Service to protect women's anonymity and the data they provided. With this certificate, neither women's names nor their answers can be released even to a court of law.

Interviewers were instructed not to discuss participants' answers or the actual questions with anyone except other interviewers, the principal investigator and the doctoral students in charge of data. Interviewers did not have access to identifying information, such as participants' last names or addresses. Office workers were responsible for collecting identifying information.

When women arrived for their interview, a registration form was completed to acknowledge informed consent and provide information to match subjects to their data. Women were given a copy of the informed consent information in two ways. One was written in technical terms and hand signed by the principal investigator. On the other form, simple English was used and the information was organized into summary points. On Permission to Contact forms, women listed friends and family members who could help project staff locate them for later interviews.

Office workers assigned participants numbers that matched membership cards. These numbers did not correspond to subject numbers used with the data. Office workers did not have access to the questions being asked or participants' answers. Moreover, interviewers were not allowed in the waiting area while the forms were completed to ensure participants' last names or addresses would not be overheard.

When completed interviews were received in the research room at the University of North Texas, subject numbers were assigned. The interviews, master sheet matching participant codes to the subject number and to participants' names, and registration forms were stored in a locked room.

Interviewers. Participants completed a structured interview containing open-ended questions and items which utilized rating scales. Due to the sensitive nature of the data being collected, questions were read and responses recorded by trained female students. Interviewers were paid \$17.00 per completed interview at Wave 1, \$25.00 at Wave 2 and Wave 3. Some students received psychology course credit for participation, others received course credit instead of pay, and other students volunteered their time, not accepting payment or course credit for their efforts.

Doctoral students in Clinical and Counseling Psychology trained prospective interviewers. Training consisted of practicing the interview item-by-item, explaining how each question should be asked and when to ask conditional questions. Standardization and confidentiality issues were stressed during training. After trainees practiced the interview aloud and role-played with each other and with friends and family, they were assessed by a doctoral student. The doctoral student played the role of a difficult participant (e.g., got off task, used the wrong rating scale, gave inconsistent responses).

They assessed whether trainees knew the interview, knew when to ask conditional questions, were able to handle extraneous questions and comments appropriately, whether their pacing was adequate, etc.

If a student did not pass this testing, she continued practicing before returning for an additional role-play. This procedure was repeated until the interviewer was sufficiently competent to begin collecting data. Continual feedback was given to the interviewers as the study progressed to ensure accuracy of the data. A total of 62 students, each conducting between one and 57 interviews, participated as interviewers for Wave 1. Some of these students also conducted Wave 2 interviews. A total of 84 female students conducted Wave 1 and/or Wave 2 interviews.

Data collection. Data were collected in two store front offices in the Oak Cliff area of Dallas. Interviews, designed to take 3 hours, were conducted in private rooms. Interviewers read questions aloud and recorded participants' answers verbatim. Response scales were kept in a notebook participants used during the interview. At the end of the interviews, women were given their incentives. Participants received \$15 in cash, a canvas tote bag and a "Project HOW" T-shirt in return for participation in Wave 1. For Wave 2 (\$35) and Wave 3 (\$45), women received more money. When completed interviews arrived at the research room, each was checked by a graduate student and all time related questions were coded for number of months, number of weeks, etc.

Some participants were dropped at Wave 1 if they did not meet the inclusion criteria. Moreover, participants unable to master the use of rating scales and those who were obviously intoxicated were dropped during the interview, but were given the

incentives for their efforts. Subjects were also dropped if they did not meet the screening criteria. Of the 996 women interviewed, 162 were dropped from the study.

Measures

It was anticipated that many of the women in the sample would have less than a high school education. Therefore, care was taken to ensure their understanding by making minor wording changes to some items and using the same rating scale whenever possible to lessen confusion for women who were unfamiliar with this type of task. Only the measures relevant to this study are described here.

Religiosity. Religiosity was assessed in both Wave 1 and Wave 2. Six items at Wave 1 tapped women's religious beliefs using 7-point rating scales. Women rated themselves on how religious they were (not at all to extremely), church attendance (never or almost never to more than once a week), the influence of religion on their lives (not at all to very much), and frequency of prayer (never to very often). The mean of these 4 items suggests the importance of religion to women at Wave 1. At Wave 2, frequency of church attendance and prayer were rated on 12-point scales (ranging from never to several times a day). The mean of these items represented Wave 2 religiosity.

To assess the conservative-liberal nature of their approach to religion, women rated (on 7-point scales) their beliefs about their religion's Bible (should be taken literally, exactly as it is written to should be interpreted to fit life as it is today) and their general religious beliefs (very conservative to very liberal). The means of these items will form an index to address the research question.

Relationship violence. Partner violence was assessed at Waves 1 and 2 using Marshall's Severity of Violence against Women Scale (SVAWS; 1992a) and Severity of

Violence Against Men Scale (SVAMS; 1992b) for threats and acts of violence by males (females) toward their female (male) partners. These measures consist of the same 46 items, but the order of severity for specific items differs. Sexual aggression was not included in this study. Women were questioned about the violence they expressed and received prior to Wave 1 on 6-point scales (never to very often) and between Wave 1 and Wave 2 interviews on 10-point scales (never to almost daily). Means will be calculated for threats and acts of violence. In sum, scores will be calculated for women's inflicted and sustained threats and acts of violence during their relationship and between Waves 1 and 2.

Anger. Anger was assessed using the Trait Anger Scale by Spielberger, Jacobs, Russell, and Crane (1983). Although anger was not measured until Wave 3, there is no reason to believe women's scores for this trait changed a great deal during the study. Trait anger appears to be stable over time, with test-retest coefficients of .77 for college students with an interval of 14 days (Jacobs, Latham, & Brown, 1988), .77 for Singaporean females over a two-week period (Bishop & Quah, 1998), and .64 for prison inmates over a two month period (Kroner & Reddon, 1992). Deffenbacher and colleagues' studies also demonstrate the stability of anger over time (Deffenbacher, Dem, & Brandon, 1986; Deffenbacher, Oetting et al., 1996).

The original 4-point rating scale (almost never, sometimes, often, almost always) was changed to 7 (never to about half the time to always). Although the original measure contained 10 items, the mean of seven items was used. These items were have a fiery temper, am quick tempered, am a hotheaded person, fly off the handle, feel annoyed when not given recognition for doing good work, furious when criticized in front of

others, and get angry when slowed down by others' mistakes. One item (feel infuriated when you do a good job and get a poor evaluation) was dropped because many women in this sample may not have understood the word infuriated or the phrase "have their work evaluated". Two items (say nasty things when you are mad, and feel like hitting someone when you are frustrated) were dropped due to relatively low factor loadings during scale development (.46 and .48 respectively), and because verbal and symbolic aggression were measured elsewhere.

Analysis

Only women who completed Wave 3 were included in this study. Consequently, attrition analysis was conducted on the relevant variables using ANOVAS. The hypotheses and research question were tested separately by using total and recent threats and violence as well as Wave 1 and Wave 2 religiosity. Partial correlations were used to test the first hypothesis. Correlations between the threats women sustained and expressed were first calculated. In separate analyses, anger and religiosity were controlled. These same procedures were used for acts of violence.

Moderation was tested using Baron and Kenny's (1986) regression procedures. With women's' threats (acts) of violence as the dependant variable, anger and religiosity and the interaction of those variables were entered. The interaction was created by multiplying the independent variable (anger) with the moderator (religiosity) (See Figure 1).

Results

Scale reliability was calculated using Cronbach Alpha coefficients. For all prior behavior, partners' threats ($\alpha = .94$) and violence ($\alpha = .94$) and women's threats ($\alpha = .91$)

and violence ($\alpha = .90$) scales were internally consistent. The scale for trait anger was reliable, with an alpha of .90. The alpha for religiosity was also quite strong (.82). However, reliability for the conservative-liberal aspect of women's religious beliefs was low (.48). Due to the low alpha, the research question was not addressed.

Only women who had expressed or sustained abuse were included in this study. This requirement left a sample of 595 women who had sustained or inflicted at least one threat or act of violence. Table 1 gives the descriptive information for the final sample and by ethnicity.

First, ANOVAs were conducted to determine whether there were ethnic differences on any of the measures. The results are shown in Table 2. Each analysis was done only with women who reported abuse on a specific measure. For example, women who had not sustained or inflicted a threat between the waves were not included for the ANOVA on Wave 2 threats. Due to the different number of participants in these analyses, a MANOVA could not be used. Consequently, the Bonferroni correction was applied to minimize the effects of additive error. A probability of .004 had to be reached to consider a finding statistically significant. The groups did not differ on sustained overall, $F(2,572) = 4.10, p < .02$, Wave 1, $F(2,516) = 3.69, p < .03$, or Wave 2, $F(2,450) = 2.25, p > .1$, threats; African American women had expressed more threats during their relationship, $F(2,572) = 8.21, p < .000$, and at Wave 1, $F(2,516) = 7.87, p < .000$, than Euro-American or Mexican American women. African American women also reported expressing more overall, $F(2,485) = 8.01, p < .000$, and Wave 1, $F(2,325) = 7.58, p < .000$, violence than Mexican American and Euro-American women. However, no differences were found on expressed violence at Wave 2, $F(2,325) = 3.57, p < .05$, or on anger $F(2,628) = .32, p >$

.1. African American women also classified themselves as more religious than the other two groups, $F(2,542) = 22.35, p < .000$.

The first hypothesis was not supported. The correlations between expressed and sustained behaviors were first calculated. Anger was then controlled in each correlation. In the next step, religiosity was controlled in each correlation. The control variables had no effect on the zero order correlations. In the sample, both expressed and sustained threats prior to the study, $r = .47, p < .001$, recent Wave 1, $r = .44, p < .001$, and Wave 2, $r = .36, p < .001$, correlations were essentially unchanged when either control variable was used. The same was found for violence prior to the study, $r = .53, p < .001$, at Wave 1, $r = .66, p < .001$, and Wave 2, $r = .42, p < .001$. Controlling for either anger or religiosity had no effect, changing the strength of the correlations by less than .03. Similar results were found when analyses were repeated within each ethnic group. Because the control variables were found to have no effect, only zero order correlations for expressed and sustained abuse among women in each ethnic group are shown in Table 3.

Hypothesis 2 predicted that religiosity would interact with anger to affect women's behavior towards their partner. Women's expression of abuse was the dependent variable in these regression equations. To create the interaction variable, anger and religiosity were multiplied together. The main effects for anger and religiosity were entered before the interaction to predict the expression of threats (violence) by females. These results are shown in Table 4. None of the regression equations reached significance. Although the hypothesized moderation occurred only in one equation (African Americans' Wave 2 violence) and nearly reached significance once (Mexican

American's Wave 2 violence), a different pattern was apparent. Anger almost always usually made a significant contribution in Step 1 and became nonsignificant when the interaction was included with three exceptions. More importantly, these results showed that consideration of women's behavior in isolation resulted in rather weak associations except for Euro-Americans' Wave 1 threats and African Americans' Wave 2 threats.

The results of the regression equations in Table 4 and the correlations in Table 3 prompted reconsideration of the hypothesis. Most of the literature suggests that women's acts are in response to their partners' behavior. Consequently, a second set of regression equations were calculated. Partner behavior was entered as both a main effect and in interaction with anger and religiosity. These results are shown in Table 5. All equations were significant at each step.

Partner behavior always made a significant contribution at Step 1. In half of the equations, this effect disappeared when the 2-way interactions were entered. The interaction of partners' threats and anger contributed to Euro-Americans' prior threats and Mexican Americans' prior threats (R^2 not significant) and Euro-American Wave 1 (R^2 not significant) and Mexican American Wave 1 threats, and for African Americans' Wave 2 (R^2 not significant) and Mexican Americans' Wave 2 threats. However, the direction at Step 3 was different for African Americans and Mexican Americans.

Though the change in R^2 was not significant, significant betas were still interpreted. The interaction of partners' threats and religiosity among Euro-Americans and Mexican Americans made a significant contribution to prior threats, but in opposite directions. It was also a significant contributor for Euro-American women's recent violence at Wave 1, Euro-Americans' and Mexican Americans' prior violence, and for

African American women on recent violence at Waves 1 and 2. The betas neared significance for Mexican American women's recent threats, African American's prior violence, and Euro-American's Wave 1 violence.

The 3-way interaction was significant in half the equations for Mexican Americans, but only for Euro-Americans Wave 1 behavior. Among African Americans, this interaction was only important for Wave 1 violence (R^2 not significant) for Euro-Americans and Mexican Americans prior threats (R^2 not significant), and Euro-American threats at Wave 1. This interaction affected Wave 2 threats among Mexican Americans, but though the beta for African American women nearly reached significance, it was in the opposite direction. For violence, the 3-way interaction only made a significant contribution for Mexican American women's prior violence and Euro-Americans' and African Americans' Wave 1 violence (R^2 not significant).

In several equations, (Wave 1 threats for African Americans, Wave 2 threats for Euro-Americans, African Americans' prior violence and all Wave 2 violence) anger and/or religiosity were significant at Step 1, but anger and religiosity always became nonsignificant at Step 3. Overall, the entry of the interactions added little to the explained variance in women's behavior. The most notable exception was Wave 1 violence among Euro-Americans and Mexican Americans.

Discussion

Although the hypotheses were not supported, there were several interesting findings. African American women tended to report more abuse than Euro-American and Mexican American women. Perhaps the discrimination experienced by African Americans has increased the likelihood they (or their partners) will behave in more aggressive ways

than women (men) in the other groups. It could also be that these low-income women may see aggressive acts as their only recourse when sustaining aversive behaviors from their partners. In addition, as the African American culture tends to emphasize spirituality and its role in daily life, it is not surprising that these women reported high levels of religiosity.

Religiosity and anger did not have a direct impact on the mutuality of threats and violence in women's relationships. This is surprising, given that religiosity is often found to curb the expression of delinquent or harmful behavior (Benda, 1997; Corwyn & Benda, 2000; Ginn et al., 1998; Patock-Peckham, Hutchinson, Cheong, & Nagoshi, 1997; Richard, Bell, & Carlson, 2000; Templin & Martin, 1999; Trusty & Watts, 1999). Moreover, despite the indications that individuals who are high in anger are more likely to express themselves in detrimental ways (Deffenbacher et al., 1994), anger also did not affect the mutuality of abusive behavior.

Although women's abusive behavior was affected by their anger, there was almost no effect for religiosity. The exception was the interaction between religiosity and anger on African American women's Wave 2 violence. Though anger almost always made a significant contribution at Step 1, it was no longer important at Step 2. From Table 4, it appears that the interaction had no overall effect on R , but usually decreased the contribution of anger. Although religiosity never had an effect, it appears to somehow suppress the direct effects of anger when combined with anger. This is consistent with previous research showing that religiosity suppresses negative behaviors (Ginn et al, 1998; Johnson et al, 2001), but is difficult to explain given the lack of significance.

The interaction between violence and religiosity made a significant contribution

only for African Americans' Wave 2 violence. The beta was negative. However, this difference suggests that either religiosity is different for African Americans and Mexican Americans, or it functions differently in conjunction with anger for these groups. If religiosity has a different meaning between these ethnic groups, its effects with other variables would, logically, be different. These are intriguing notions that have been largely ignored in research.

Since the violence literature supports the notion of mutual or reciprocal violence, especially in community and student samples (Archer & Ray, 1989; Clark et al, 1994; Marshall & Rose, 1990), it was reasonable to enter the threats (violence) sustained by females into the regression equations. The resulting patterns, however, are difficult to explain. Male behavior was always a contributor at Step 1. This was not surprising given that women usually respond with violence after experiencing it from their male partners (Cordova et al., 1993; Hamberger & Lohr, 1997; Jacobson et al., 1994; Margolin, 1988). It appears that women's behavior is guided more by situational factors than interpersonal traits. Yet, despite the initial strength of the contribution, it is surprising to see the effect was not maintained when the interactions were entered, particularly because they only made a significant change in R^2 in six of the equations.

Ethnic differences are even more difficult to explain. Interactions with partners' behavior make a more significant contribution more often for Euro-Americans and Mexican Americans than for African Americans. As African American women had higher scores on religiosity and several abuse variables, it is reasonable to assume that the interactions are minimizing the independent effects of each. Although the lack of interaction between these variables may account for the variation for African Americans,

it is more difficult to explain for the other ethnic groups. Mexican American women's religiosity appears to be more relevant to their expression of violence as evidenced by the significant betas for interactions. Mexican American women were least aggressive to their partners on most measures. This may be due to their patriarchal culture (Neff, 1990). Fear of their partners may keep them from expressing their feelings of anger. Patriarchy in conjunction with the strong emphasis of Catholicism and Christianity within their culture may keep Mexican American women in roles that discourage the expression of negative emotion.

The interaction of anger and religiosity was never important for African American women, but was for the other two groups. The effect occurred for Wave 1 threats and Mexican Americans' Wave 1 violence. What was interesting was that the betas for Wave 1 threats were in opposite directions, making a positive contribution for Euro-Americans and a negative contribution for Mexican Americans on prior and Wave 1 threats. As suggested in the discussion of Table 4, religiosity appears to function differently depending on ethnicity. The literature on religiosity discusses possible effects of ethnicity, but typically only within groups, not between ethnic groups. For example, some authors address possible effects of African American (Ellison, 1992; Thompson & McRae, 2001) or Mexican American (Leaper & Valin, 1996) culture, but studies have not been conducted to determine how differences are manifested, other than the fact that Mexican Americans are more likely than African Americans to be Catholic (Roof & McKinney, 1990).

The 3-way interaction was only significant among Euro-American and Mexican American women. Again, the high scores of African American religiosity and high scores

of violence appear to be counteracting each other. However, the nonsignificant contribution of the 3-way interactions in the majority of the equations is quite confusing, though not surprising given the nonsignificant effects anger and religiosity had on the relationship between the expression and receipt of violence.

In summary, females' expression of threats and violence is best explained when their partners' behavior is included in the equations. Furthermore, religiosity does not appear to be important in itself. However, when it interacts with other variables (i.e., anger or partners' aggression) the contribution of specific variables changes, most often becoming nonsignificant.

There are technical limitations to this study. Because multicollinearity was not tested before analysis, it may be a significant factor in this study. As male violence alone was always a significant predictor of female violence, the interaction terms of his threats or violence that included anger and religiosity are likely highly correlated with his behavior. Secondly, choosing a sub-sample that had only expressed or sustained threats (violence) at a particular wave may have made the results more difficult to interpret. Since sub-samples were selected, it is plausible that religiosity may moderate anger for women who did not express violence to their partners. Additionally, different effects may be found across the sub-samples because of varying numbers of subjects. In addition, the sample came from a southern portion of the United States in an area considered to be part of the "Bible-belt." As a result, most women considered themselves highly religious. Second, as very few women considered themselves to be liberal in their religious beliefs, the research question could not be answered.

Trait anger was measured with an attenuated scale based on Spielberger's trait

anger scale. Thus, it is likely that the stability of the measure was changed. In addition, it is also likely that since trait anger was measured at Time 3, individuals may have been experiencing different levels of anger when the violence scale was given at Waves 1 and 2. Lastly, the most important limitation results from the archival nature of this study. Several important variables could not be considered. For example, the attributions that women may make about their partners' aggression were not included. These attributions may affect perceptions of their partners' behavior, and affect the anger and/or aggression they would express. Partners' anger and religious beliefs were not included. As relationship violence often follows a pattern of escalation (Cordova et al., 1993; Hamberger, 1997), it would be helpful to see how men's anger and religious beliefs contribute to the process.

Due to these technical limitations, clinical implications should be considered with caution. Clinicians should be mindful of the influence of religion in the daily lives of their clients, particularly when it comes to domestic violence issues. Minorities in particular will benefit from therapists who attempt to understand the many different facets of their issue, by including not only the cultural issues, but the religious ones as well. For instance, Mexican American females may need help in expressing negative emotion more than someone from another ethnic background. African American women may need to consider alternative ways to resolving conflict with their partners than patterns that continue to escalate the violence. Clinicians should seek to understand the effects of religiosity in their clients, and use the benefits to help the client achieve their goals.

Clinicians need to be careful not to make false assumptions about their client's

religiosity. While it may seem logical to assume that a client with a conservative religious background may have patriarchal views, the client may not see themselves or their situation from that perspective. In addition, this study suggests that religiosity is a function of ethnicity, so therapists should not make universal assumptions. Clinicians should strive to grasp understanding of their client's religiosity. Clients' experience of religiosity may give them a sense of freedom from oppression and hope, not recognizing constraints that may be seen by the therapist. It is crucial that therapists see the world through the lens of their client, and not with pre-conceived notions about religion or different ethnic groups.

Lastly, therapists need to gain a clearer perspective on mutual or reciprocal violence. Domestic violence is often assumed to be a one-sided issue, and therapists may be inclined to confront only the "visible" perpetrator rather than understanding and unlocking the interpersonal dynamics. Therapists must also recognize that it is likely that women may contribute to the pattern of violence within the relationship, and that it is possible that the attributions that partners are making about each other may contribute to the breakdown of the relationship.

Three conclusions can be drawn from this study. First, men's behavior was more important in explaining women's behavior than was their own anger. Second, to the degree that women's religiosity affects their use of threats or violence, the effect is likely to be indirect. Third, future studies should address within group differences, given the variation within ethnic groups in this study.

Table 1

Descriptive statistics

	Sample				African Americans				Euro-Americans				Mexican Americans			
	N = 595				n = 235				n = 170				n = 187			
	M	(SD)	Min.	Max.	M	(SD)	Min.	Max.	M	(SD)	Min.	Max.	M	(SD)	Min.	Max.
<u>Sustained threats</u>																
All Prior	.70	(.84)	.00	4.90	.71	(.91)	.00	4.53	.83	(.89)	.00	4.90	.59	(.67)	.00	3.94
Wave 1	.54	(.93)	.00	7.11	.63	(1.08)	.00	6.32	.60	(.97)	.00	7.10	.38	(.63)	.00	3.90
Wave 2	.81	(1.42)	.00	9.00	.91	(1.63)	.00	9.00	.86	(1.34)	.00	6.32	.64	(1.17)	.00	6.95
<u>Expressed threats</u>																
All prior	.56	(.64)	.00	4.95	.69	(.77)	.00	4.95	.48	(.54)	.00	3.20	.46	(.48)	.00	3.35
Wave 1	.39	(.66)	.00	6.50	.52	(.89)	.00	6.50	.30	(.41)	.00	2.05	.31	(.44)	.00	2.95
Wave 2	.54	(.99)	.00	7.35	.69	(1.26)	.00	7.35	.43	(.73)	.00	5.15	.45	(.76)	.00	5.15
<u>Sustained violence</u>																
All prior	.38	(.61)	.00	4.71	.42	(.67)	.00	4.71	.42	(.62)	.00	3.48	.32	(.51)	.00	3.14
Wave 1	.21	(.57)	.00	5.10	.29	(.71)	.00	4.95	.17	(.39)	.00	2.62	.13	(.49)	.00	5.10
Wave 2	.36	(.90)	.00	7.68	.46	(1.08)	.00	7.67	.33	(.85)	.00	6.33	.27	(.67)	.00	4.95
<u>Expressed violence</u>																
All prior	.24	(.43)	.00	3.60	.33	(.55)	.00	3.60	.20	(.38)	.00	2.90	.18	(.26)	.00	1.35
Wave 1	.13	(.37)	.00	4.15	.21	(.54)	.00	4.15	.08	(.18)	.00	1.25	.09	(.19)	.00	1.85
Wave 2	.26	(.55)	.00	4.40	.33	(.69)	.00	4.39	.21	(.42)	.00	2.87	.22	(.43)	.00	2.80
Anger	3.82	(1.43)	1.00	7.00	3.75	(1.52)	1.00	7.00	3.79	(1.36)	1.00	7.00	3.79	(1.36)	1.00	7.00
Religiosity	11.42	(3.64)	1.00	18.00	12.67	(3.05)	1.00	18.00	10.58	(3.71)	1.00	17.75	10.58	(3.71)	1.00	17.75

Table 2

Means by ethnicity

	African Americans	Euro-Americans	Mexican Americans
<u>Sustained threats</u>			
All prior	.73	.86 ^a	.61 ^a
Wave 1	.72 ^a	.68 ^b	.45 ^{ab}
Wave 2	1.16	1.16	.84
<u>Expressed threats</u>			
All prior*	.71 ^{ab}	.50 ^a	.48 ^b
Wave 1	.59 ^{ab}	.34 ^a	.37 ^b
Wave 2	.88 ^{ab}	.58 ^a	.59 ^b
<u>Sustained violence</u>			
All prior	.51	.50	.39
Wave 1	.50 ^a	.34	.26 ^a
Wave 2	.65	.51	.39
<u>Expressed violence</u>			
All prior*	.40 ^{ab}	.24 ^a	.22 ^b
Wave 1*	.36 ^{ab}	.16 ^a	.16 ^b
Wave 2	.47	.32	.32
Anger	3.80	3.82	3.97
Religiosity*	12.63 ^{ab}	10.50 ^a	10.68 ^b

Note: Means sharing a superscript at $p < .05$.

* Significant difference using the Bonferroni correction

Table 3

Expressed behavior: Correlations by ethnicity

	<u>African Americans</u>		<u>Euro-Americans</u>		<u>Mexican Americans</u>	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
<u>Threats</u>						
All prior	.52	.000	.46	.000	.37	.000
Recent Wave 1	.41	.000	.34	.000	.38	.000
Recent Wave 2	.28	.000	.47	.000	.24	.002
<u>Violence</u>						
All prior	.59	.000	.44	.000	.28	.000
Recent Wave 1	.67	.000	.40	.000	.34	.000
Recent Wave 2	.27	.000	.73	.000	.27	.001

Table 4

Hypothesized moderation of women's abusive behavior

	Sample			African Americans			Euro-Americans			Mexican Americans		
	Step 1		Step 2	Step 1		Step 2	Step 1		Step 2	Step 1		Step 2
	beta	p	beta p	beta	p	beta p	beta	p	beta p	beta	p	beta p
Prior threats	<i>R</i> = .26	(<i>N</i> = 566)	<i>R</i> = .26	<i>R</i> = .25	(<i>n</i> = 223)	<i>R</i> = .25	<i>R</i> = .32	(<i>n</i> = 161)	<i>R</i> = .32	<i>R</i> = .31	(<i>n</i> = 180)	<i>R</i> = .32
anger	.261	.00	.236 --	.255	.00	.314 --	.315	.00	.393 --	.307	.00	.058 --
religiosity	.035	--	.014 --	.012	--	.047 --	-.102	--	-.027 --	.018	--	-.221 --
interaction			.034 --			-.069 --			-.117 --			.350 --
Wave 1	<i>R</i> = .27	(<i>N</i> = 511)	<i>R</i> = .27	<i>R</i> = .28	(<i>n</i> = 204)	<i>R</i> = .28	<i>R</i> = .41	(<i>n</i> = 148)	<i>R</i> = .42	<i>R</i> = .26	(<i>n</i> = 157)	<i>R</i> = .27
anger	.268	.00	.210 --	.282	.00	.244 --	.413	.00	.457 .05	.257	.01	.111 --
religiosity	.019	--	-.031 --	-.007	--	-.031 --	-.119	--	-.075 --	-.039	--	-.188 --
interaction			.078 --			.045 --			-.068 --			.209 --
Wave 2	<i>R</i> = .32	(<i>N</i> = 448)	<i>R</i> = .32	<i>R</i> = .40	(<i>n</i> = 180)	<i>R</i> = .40	<i>R</i> = .27	(<i>n</i> = 125)	<i>R</i> = .29	<i>R</i> = .23	(<i>n</i> = 141)	<i>R</i> = .25
anger	.311	.00	.134 --	.395	.00	.668 .03	.266	.01	-.089 --	.224	.01	-.099 --
religiosity	.056	--	-.096 --	-.005	--	.167 --	.036	--	-.324 --	.035	--	-.281 --
interaction			.239 --			-.328 --			.547 --			.454 --
Prior violence	<i>R</i> = .14	(<i>N</i> = 482)	<i>R</i> = .15	<i>R</i> = .18	(<i>n</i> = 188)	<i>R</i> = .18	<i>R</i> = .15	(<i>n</i> = 139)	<i>R</i> = .16	<i>R</i> = .10	(<i>n</i> = 153)	<i>R</i> = .13
anger	.132	.01	.209 --	.171	.02	.153 --	.146	.09	.326 --	.092	--	.341 --
religiosity	.066	--	.132 --	.051	--	.039 --	.021	--	.192 --	-.046	--	.201 --
interaction			-.104 --			.022 --			-.263 --			-.361 --
Wave 1	<i>R</i> = .18	(<i>N</i> = 323)	<i>R</i> = .18	<i>R</i> = .22	(<i>n</i> = 134)	<i>R</i> = .22	<i>R</i> = .25	(<i>n</i> = 86)	<i>R</i> = .26	<i>R</i> = .16	(<i>n</i> = 101)	<i>R</i> = .16
anger	.156	.01	.195 --	.209	.02	.171 --	.247	.02	.510 --	.111	--	.266 --
religiosity	.079	--	.113 --	.093	--	.069 --	-.082	--	.180 --	-.110	--	.058 --
interaction			-.053 --			.044 --			-.409 --			-.233 --
Wave 2	<i>R</i> = .28	(<i>N</i> = 402)	<i>R</i> = .28	<i>R</i> = .33	(<i>n</i> = 163)	<i>R</i> = .36	<i>R</i> = .32	(<i>n</i> = 108)	<i>R</i> = .33	<i>R</i> = .20	(<i>n</i> = 129)	<i>R</i> = .26
anger	.273	.00	.207 --	.326	.00	.976 .01	.247	.01	-.219 --	.197	.03	-.360 --
religiosity	.064	--	.008 --	-.021	--	.401 .08	.165	.08	-.120 --	.014	--	-.523 .08
interaction			.089 --			-.787 .05			.429 --			.767 .06

Table 5
Effects of sustained acts, anger, and religiosity on women's abusive behavior

	African Americans						Euro-Americans						Mexican Americans					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	beta	p	beta	p	beta	p	beta	p	beta	p	beta	p	beta	p	beta	p	beta	p
Prior threats			(n = 223)						(n = 161)						(n = 180)			
	R = .55		R = .56		R = .56		R = .55		R = .61*		R = .62		R = .47		R = .51		R = .52	
partners' threats	.491	.00	.572	.08	1.391	--	.444	.00	-.568	.03	-2.101	.02	.356	.00	-.224	--	1.614	.08
anger	.179	.01	.353	--	.506	--	.293	.00	.151	--	-.217	--	.286	.00	.026	--	.456	--
religiosity	.006	--	.031	--	.128	--	-.084	--	-.188	--	-.493	.06	.028	--	-.072	--	.326	--
threats x anger			.279	--	1.203	--			.631	.01	2.427	.01			.666	.01	-1.493	--
threats x religiosity			.179	--	-.670	--			.479	.05	2.071	.02			-.036	--	-1.841	.04
anger x religiosity			.134	--	.306	--			-.041	--	.487	--			.141	--	-.466	--
3-way interaction					.953	--					-1.884	.06					2.174	.03
Wave 1 threats			(n = 204)						(n = 148)						(n = 157)			
	R = .57		R = .57*		R = .57		R = .51		R = .54		R = .60*		R = .52		R = .61*		R = .62	
partners' threats	.495	.00	.895	.01	1.210	--	.297	.00	.257	--	-3.995	.00	.450	.00	.803	.01	2.221	.04
anger	.213	.00	.299	--	.343	--	.380	.00	.227	--	-.436	--	.250	.00	.114	--	.350	--
religiosity	.023	--	.025	--	.055	--	-.121	.09	-.103	--	-.672	.01	-.058	--	.159	--	.390	--
threats x anger			.286	--	-.637	--			.450	.03	5.306	.00			.918	.00	-.584	--
threats x religiosity			.139	--	-.460	--			.073	--	.984	.01			-.023	--	-.339	--
anger x religiosity			.047	--	-.096	--			-.372	--	3.879	.01			-1.261	.00	-2.631	.01
3-way interaction					.358	--					-4.839	.00					1.498	--
Wave 2 threats			(n = 180)						(n = 125)						(n = 141)			
	R = .47		R = .57*		R = .52		R = .53		R = .56		R = .56		R = .32		R = .36		R = .40*	
partners' threats	.249	.00	.223	--	-1.975	--	.451	.00	-.172	--	-.496	--	.225	.01	-.397	--	1.652	.09
anger	.371	.00	.431	--	-.041	--	.237	.01	-.158	--	-.216	--	.214	.01	-.102	--	.326	--
religiosity	-.021	--	.175	--	-.071	--	.018	--	-.274	--	-.327	--	.038	--	-.306	--	.104	--
threats x anger			.493	.02	2.868	.03			.613	.05	.978	--			.243	--	-2.258	.04
threats x religiosity			-.441	--	1.774	--			.055	--	.386	--			.410	--	-1.679	.08
anger x religiosity			-.213	--	.305	--			.407	--	.489	--			.366	--	-.255	--
3-way interaction					-2.358	.06					-.381	--					2.605	.02
Prior violence			(n = 188)						(n = 139)						(n = 153)			
	R = .60		R = .61		R = .62		R = .46		R = .52		R = .53		R = .30		R = .32		R = .32	
partners' violence	.579	.00	.504	--	-1.294	--	.438	.00	-.522	--	-2.232	.03	.280	.00	.061	--	-2.916	.02
anger	.098	--	.182	--	-.091	--	.126	--	.102	--	-.170	--	.098	--	.341	--	-.124	--
religiosity	.012	--	-.017	--	-.187	--	.027	--	.053	--	-.188	--	-.044	--	.239	--	-.255	--
threats x anger			-.270	--	1.742	--			.670	.01	2.612	.02			.240	--	3.566	.01
threats x religiosity			.339	--	2.228	.08			.357	--	2.179	.04			-.009	--	2.944	.02
anger x religiosity			-.039	--	.273	--			-.153	--	.229	--			-.414	--	.283	--
3-way interaction					-2.095	--					-2.073	.07					-3.340	.01
Wave 1 violence			(n = 134)						(n = 86)						(n = 101)			
	R = .68		R = .69		R = .72		R = .44		R = .58*		R = .60		R = .38		R = .59*		R = .61	
partners' violence	.651	.00	1.039	.02	-4.020	.01	.372	.00	-.587	--	-3.794	.03	.345	.00	1.165	.06	-3.402	--
anger	.108	--	.312	--	-.116	--	.188	.07	.117	--	-.113	--	.127	--	.269	--	-.025	--
religiosity	.054	--	.148	--	-.118	--	-.104	--	.149	--	-.157	--	-.086	--	.382	--	.027	--
threats x anger			-.425	--	5.103	.01			1.369	.00	4.892	.01			1.152	.00	5.276	.02
threats x religiosity			.018	--	5.422	.01			-.254	--	.180	--			-.369	--	.116	--
anger x religiosity			-.175	--	.306	--			-.328	--	2.190	.08			-1.918	.01	2.501	--
3-way interaction					-5.847	.01					-3.527	.04					-4.035	--
Wave 2 violence			(n = 163)						(n = 108)						(n = 129)			
	R = .41		R = .49*		R = .49		R = .75		R = .76		R = .76		R = .33		R = .39		R = .39	
partners' violence	.254	.00	.727	--	-1.169	--	.692	.00	-.115	--	-.334	--	.262	.01	.978	.02	.073	--
anger	.314	.00	.648	.05	.349	--	.189	.01	-.024	--	-.047	--	.191	.03	-.174	--	-.306	--
religiosity	-.037	--	.341	--	.170	--	.069	--	-.184	--	-.205	--	.025	--	-.279	--	-.398	--
threats x anger			.379	--	2.226	--			.129	--	.369	--			-.209	--	1.026	--
threats x religiosity			-.865	.02	1.045	--			.303	--	.335	--			-.551	--	.423	--
anger x religiosity			-.504	--	-.171	--			.702	--	.927	--			.566	--	.770	--
3-way interaction					-1.817	--					-.247	--					-1.313	--

*The change in R^2 was significant at $p < .05$

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